



through the sealing (Cf. explanation in the specification related to Fig. 8). Hence, as the container with the sealing element of the present invention is applied for the container for accommodating semiconductor wafers, it is effective to prevent contamination from exterior environment.

Meanwhile, when the container door is closed, since internal pressure is easily released through the sealing element, a large force is not required (if a large force would be required when the door would be closed, the apparatus tends to become larger in size).

Therefore, in the sealing element of the present invention, sealing is made by contact with the curved portion of the protruding part 22, thus to establish the one-directional seal. Furthermore, when the curved portion which is annularly configured would have a contact with the door element to establish sealing, it is necessary that the sealing element should attain a uniform contact with the door element. However, if tip of the protruding part 22 would be formed too sharp, chances are the tip might not be achieved. Hence, the sealing element of the present invention may have a rounded projection at the distal end (tip) of the protruding part 22.

Claim 1 has been amended to recite these features and to recite the cooperation of the protruding part with the fitted element and the fitting element.

On the other hand, Meyer et al. as well as Poltorak both disclose a “two-directional seal.” That is to say, the sealing is performed separately in exterior and in interior, which does not have a feature of releasing high pressure gas in interior side of vessel to exterior side. In respect, Meyer et al. disclose a double-directional gasket whose tip (distal end) is utilized for sealing, so that sealing is maintained when either side is subjected to higher pressure. Similarly to the above, Poltorak also discloses a two-directional seal which can maintain sealing when either side of a vessel is subjected to higher pressure by means of bulbous portion at the vertical leg of bifurcated gasket. Here, the provision of the bulbous portion does not seem to be for the purpose of preventing wavy deformation of the gasket, but to retain sufficient contact (sealing) area (by enlarging disposing area of the sealing element).







Krampotich discloses a seal (26) which has a greater dimension portion (150) in a radial direction and a lesser dimension portion (151) perpendicular to the greater dimension portion (150) and in an axial direction (A1) which is the direction along which a door (24) is applied to an enclosure portion (22). The lesser dimension portion (151) of the seal (26) is set into a radially inset groove (74) of the door (24), from where the greater dimension portion (150) extends outward, whereby sealing is established by protruding sealing sections 96 and 98 which protrude in axial direction (A1) from the greater dimension portion (150).

On the other hand, in the present invention, the endless portion of the sealing element is tilted onto a fit-holding groove, from where a protruding part with a tapered configuration is projected obliquely and outwardly with respect to the open front of container body so as to form a substantially acute angle between the protruding part and contact surface to establish sealing, as illustrated in Fig. 8 of the present invention. Hence, the configuration of the sealing element of the present invention is quite different from Krampotich wherein the contact surface and protruding sealing sections are abutted perpendicularly so as to establish sealing.

Consequently, Krampotich in view of Meyer does neither discloses nor suggests the feature of the subject matter set forth in claim 9.

On this basis, reconsideration and allowance of claim 9 are in order.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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